# Rohan Badiga

Cerritos, California

Firmware Software Engineer | https://github.com/Agentrb241/Portfolio.git

#### **EDUCATION**

# **University of California, Riverside**

Graduation: 2021 B.S. Computer Engineering

#### RELEVENT COURSES

- Architecture of Computer Systems
- Circuit Analysis
- •Concurrent Programming
- Digital & Analog Signals & Systems Embedded & Real-Time Systems Logic Design
- Operating Systems
- Software Construction
- •Software Engineering Principles

### **TECHNICAL SKILLS**

C++ (Preferred)

C

Python Java

# TOOLS/ PROTOCOL

Embedded Systems Arduino/AT Mega

Multimeter Oscilloscopes

Function Generator

Agile

Git Visual Studio

MS Office

C C

Greenfoot BlueJ

MATLAB

Android Studio

IntelliJ

NVMe

PCIe

SAS/SATA

SCSI

UART JTAG

RTOS

#### **CERTIFICATIONS**

PCEP – Certified Entry-Level Python Programmer

# PROFESSIONAL EXPERIENCE

#### **Software Engineering Intern**

Epson America Inc.

- Analyzes, designs, coordinates, and codes the development of software systems to form a basis for the solution of information processing problems using Python/C/C++,etc
- Worked on database integration by parsing JSON files to fill product descriptions on company website along with implementation of new features for web UI applications.
- Worked on company Migration from Lotus Notes to Office 365 integration.
- Participated in reviewing computer system capabilities, workflow, and scheduling limitations to determine if requested changes to operating system are possible

# **Work Order and Small Projects Personnel**

University of California, Riverside: Facilities Services

- Organized merger between TMS and Famous systems to increase productivity by 200%
- Helped manage over 1000 work orders and 100 projects
- Built & managed 3 databases on MS Access

#### **PROJECTS**

# **Smart Battery Charger**

Circuit Construction, Embedded Systems, Arduino, MS Visio

- Built a Smart Battery charger that can charge a NiCad battery at 1/10C using PCB level hardware
- Designed application with real time data collection to control equipment that measures battery charging potential utilizing cost effective methods in battery charging
- Made over 30 Flowcharts defining individuals functions in project and show data flow
- Utilized chip interfacing for communication between sensors and circuit

# Flappy Bird

C, Embedded Systems, ATMega1284

- Built with Analog Stick and 8x8 LED Matrix and one button for reset purposes with microcontroller interfacing
- 3 programmed levels with increasing difficulty programmed in finite state machines
- Created 3 synchronized state machines for real time input

# **Uber Analytics Application**

Java, Android Studio, Tomcat

- Designed application that shows interactive data for UBER in New York using REST API architecture in Java
- Created a CSV to JSON parser and used parsed data to show analytics in bar-graph form and display top-10 query results from index
- Analyzes performance indicators such as system's response time, number of transactions per second, and number of programs being processed at once, to ensure that system is operating efficiently
- Utilized Tomcat and Apache servers for cloud server management

### Star Wars in Java

Java, BlueJ, Greenfoot

- Created a 16-bit game with GUI and user input similar to classic side-scrollers.
- All characters have full animations for not only control but special effects too.
- Uses predictive algorithms for enemy to dodge attacks and track player.

#### **LEADERSHIP**

# **Vice President of Finance**

Inter-Fraternity Council at University of California, Riverside

- In charge of finances and budgets for 8 on campus Fraternities and ensuring IFC budget is intact.
- In charge of organizing recruitment events for Winter Quarter. Always stayed focused on the logistics of getting new members to take part in campus Greek Life.
- Budgeting expenditures for the IFC and balancing the budget so the chapters run within the limit.





